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a zoom driver which moves said light emitter along an axis to vary an illumination angle;

a detector which detects a zoom position of said light emitter;

a calculator which calculates a pre-flash emission level according to the detected zoom position so that illuminance on an object at a predetermined distance is substantially constant regardless of a variation of said illumination angle;

a controller which activates said light emitter to emit a preliminary flash emission, before a main flash emission, by supplying a voltage corresponding to said pre-flash emission level for said light emitter; and

a memory in which a maximum guide number that varies in accordance with said zoom position, a constant predetermined reference guide number, and a predetermined reference flash emission level serving as a correction constant are stored,

wherein said maximum guide number, said reference guide number, and said reference flash emission level are stored in said memory, and wherein said calculator calculates a pre-flash emission level using the following equation:

$$V_{fp} = V_a \times (G_{nos}/G_{no}(\text{zoom}))^2$$

wherein "V_{fp}" represents the pre-flash emission level;

"V_a" represents the reference flash emission level;

"G_{nos}" represents the reference guide number; and

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"Gno (zoom)" represents the maximum guide number corresponding to the detected zoom position.

2. (Clean Copy) The zoom flash according to claim 1, wherein said calculator calculates said pre-flash emission level so that an effective guide number is substantially constant regardless of said variation of said illumination angle.

~~3A~~. (Clean Copy) The zoom flash according to claim 1, further comprising a terminal connector via which said zoom flash is electrically connectable to a camera body;

wherein said zoom driver moves said light emitter in accordance with a focal length of a photographing lens of the camera body when said zoom flash is electrically connected to the camera body.

4/8. (Clean Copy) The zoom flash according to claim 1, wherein said control device controls said light emitter to perform a pre-flash emission in a flat emission mode.

56. (Clean Copy) A flash photography system having a camera body and at least one zoom flash, said at least one zoom flash being activatable to emit a preliminary flash emission before a main flash emission, wherein said at least one zoom flash comprises:

a light emitter;

a zoom driver which moves said light emitter along an axis to vary an illumination angle; and

a detector which detects a zoom position of said light emitter;

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wherein one of said camera body and said at least one zoom flash comprises:

a calculator which calculates a pre-flash emission level according to the detected zoom position so that an illuminance on an object at a predetermined distance is substantially constant regardless of a variation of said illumination angle;

a controller which activates said light emitter to emit a preliminary flash emission by supplying a voltage corresponding to said pre-flash emission level for said light emitter before a main flash emission; and

a memory in which a maximum guide number that varies in accordance with said zoom position, a constant predetermined reference guide number, and a predetermined reference flash emission level serving as a correction constant are stored;

wherein said maximum guide number, said reference guide number, and said reference flash emission level are stored in said memory, and wherein said calculator calculates a pre-flash emission level using the following equation:

$$V_{fp} = V_a \times (G_{nos}/G_{no}(\text{zoom}))^2$$

wherein "V_{fp}" represents the pre-flash emission level;

"V_a" represents the reference flash emission level;

"G_{nos}" represents the reference guide number; and

"G_{no}(zoom)" represents the maximum guide number corresponding to the detected zoom position.

6 1 6 ⁵ 1. (Clean Copy) The flash photography system according to claim ⁵ 6, wherein said calculator calculates said pre-flash emission level so that an effective guide number is substantially constant regardless of said variation of said illumination angle.

7 8 7 ⁵ 8. (Clean Copy) The flash photography system according to claim ⁵ 8, further comprising a terminal connector via which said zoom flash is electrically connectable to a camera body;

wherein said zoom driver moves said light emitter in accordance with a focal length of a photographing lens of said camera body when said zoom flash is electrically connected to said camera body.

8 10 8 ⁵ 10. (Clean Copy) The flash photography system according to claim ⁵ 8, wherein said controller controls said light emitter to perform a pre-flash emission in a flat emission mode.

Cancel claims ³ 3 and ⁸ 8 without prejudice or disclaimer of the subject matter.

REMARKS

Upon entry of the present amendment, claims 3 and 8 will have been canceled without prejudice or disclaimer of the subject matter, and claims 1, 2, 4-7, 9 and 10 will have been amended.

In view of the herein contained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding objection and rejections set forth